



Press Release

Nippon Chemi-Con Corporation
October 2, 2019

Mass Production of Low-Resistance Screw Terminal Type Supercapacitors for High Voltage A rated voltage of 2.8V achieved

Nippon Chemi-Con has started mass production of low-resistance screw terminal type supercapacitors DXF Series with a rated voltage improved to 2.8V from 2.5V (our standard products: DXE Series).

At Nippon Chemi-Con, we have mass-produced high capacitance screw terminal type supercapacitors and supplied products for energy regeneration in automobiles, heavy construction equipment and harbor cranes, as well as countermeasure devices for instantaneous voltage drops and vending machines for disaster countermeasures. This Series is based on the conventional DXE Series and has a higher voltage and longer life. They contribute to space saving by reducing the number of series in applications with high system voltage, such as countermeasure devices for instantaneous voltage drops and harbor cranes. In addition to the applications above, we will make offers for further market expansion.

[Technical Features]

By analyzing the mechanism of characteristic degradation of conventional supercapacitors when high voltage is applied, selecting optimum materials and improving the structure of the pressure valve, we succeeded in developing capacitors with little degradation even under a high voltage of 2.8V (60°C). Furthermore, by derating the temperature, these products can be used even at 3.0V (50°C).

Additionally, when used at 2.5V 70°C, the rate of the DXE Series, it has better life characteristics than the DXE Series.

We have started mass production of products with a case size of $\phi 63.5 \times 172$ Lmm and will gradually expand the product lineup by developing other sizes.

[Main Specifications]

- Category temperature range: -40°C to +60°C (-40 to +50°C)
- Rated voltage: 2.8V (3.0V)
- Capacitance [min.]: 3,150F
- Internal resistance (DCIR) [typ.]: 0.3m Ω
- Capacitance tolerance: +20 to 0%
- Case size: $\phi 63.5 \times 172$ Lmm
- Endurance: guarantees 2,000 hours at 60°C

[Production Site]

Chemi-Con Yamagata Corp. Yonezawa Plant (a wholly owned subsidiary of Nippon Chemi-Con)

[Mass Production]

Mass production started in April 2019.

[Product Appearance]

